

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claim 1 (Original): Process for preparing a carbon-coated, Li-containing olivine or NASICON powder, comprising the steps of

- preparing a water-based solution comprising, as solutes, one or more Li-containing olivine or NASICON precursor compounds and one or more carbon-bearing monomer compounds,

- precipitating the Li-containing olivine or NASICON precursor compounds and polymerising the monomer compounds in a single step

- heat treating the obtained precipitate in a neutral or reducing environment so as to form a Li-containing olivine or NASICON crystalline phase and decompose the polymer to carbon.

Claim 2 (Currently Amended): Process according to claim 1, ~~whereby~~ wherein the crystalline phase is $\text{Li}_u\text{M}_v(\text{XO}_4)_w$ with $u = 1, 2 \text{ or } 3$, $v = 1 \text{ or } 2$, $w = 1 \text{ or } 3$, M is $\text{Ti}_a\text{V}_b\text{Cr}_c\text{Mn}_d\text{Fe}_e\text{Co}_f\text{Ni}_g\text{Sc}_h\text{Nb}_i$ with $a+b+c+d+e+f+g+h+i = 1$ and X is P_{x-1}S_x with $0 \leq x \leq 1$.

Claim 3 (Currently Amended): Process according to claim 2, ~~whereby~~ wherein the crystalline phase is LiFePO_4 .

Claim 4 (Currently Amended): Process according to claim 1, ~~whereby~~ wherein the precipitation of Li-containing olivine or NASICON compounds and the polymerisation of the monomers is performed by evaporating water from the water-based solution.

Claim 5 (Currently Amended): Process according to claim 4, ~~whereby~~ wherein the carbon-bearing monomer compounds are a polyhydric alcohol and a polycarboxylic acid.

Claim 6 (Currently Amended): Process according to claim 5, ~~whereby~~ wherein the polyhydric alcohol is ethylene glycol and the polycarboxylic acid is citric acid.

Claim 7 (Currently Amended): Process ~~for the production of carbon-coated LiFePO₄~~ according to claim 5, ~~whereby~~ wherein

- the water-based solution contains equimolar amounts of Li, Fe and phosphate,
- the evaporation of water from the solution is performed at a temperature between 60 and 100 °C,
- the heat-treatment is performed at a temperature between 600 and 800 °C,
~~preferably between 650 and 750 °C~~

Claim 8 (Currently Amended): Process according to claim 7, ~~whereby~~ wherein the water-based solution is prepared using LiH₂PO₄ and Fe(NO₃)₃.aq.

Claim 9 (Original): A carbon-coated LiFePO₄ powder for use in Li insertion-type electrodes, which, when used as an active component in a cathode cycled between 2.0 and 4.5 V against a Li anode at a discharge rate of C / 5 at 25 °C, is characterised by a reversible electrode capacity expressed as a fraction of the theoretical capacity and a total carbon content of

- at least 75 % capacity and less than 4 wt.% carbon, or,
- at least 80 % capacity and less than 8 wt.% carbon.

Claim 10 (Currently Amended): Electrode mix containing carbon-coated LiFePO₄ ~~according to claim 9~~ for use in Li insertion-type electrodes, which, when used as an active component in a cathode cycled between 2.0 and 4.5 V against a Li anode at a discharge rate of C / 5 at 25 °C, is characterised by a reversible electrode capacity expressed as a fraction of the theoretical capacity and a total carbon content of

- at least 75% capacity and less than 4 wt.% carbon, or,
- at least 80% capacity and less than 8 wt.% carbon.

Claim 11 (Currently Amended): A battery containing an electrode mix ~~according to claims 10~~ containing carbon-coated LiFePO₄ for use in Li insertion-type electrodes, which, when used as an active component in a cathode cycled between 2.0 and 4.5 V against a Li anode at a discharge rate of C / 5 at 25 °C, is characterised by a reversible electrode capacity expressed as a fraction of the theoretical capacity and a total carbon content of

- at least 75% capacity and less than 4 wt.% carbon, or,

at least 80% capacity and less than 8 wt.% carbon.

Claim 12 (New): The process of claim 7, wherein the heat-treatment is performed at a temperature between 650 and 750 °C.